ABSTRACT OF THE DISCLOSURE

[0088] A process for producing a fiber-reinforced molded article and the resulting article such as a cantilevered battery tray. In the process, thermoplastic material in its solid state having a melt flow index above 25 g/10 minutes is fed into a suitable processing machine simultaneous with the addition of reinforcing fibers having a length of at least 0.375 inch or greater and sized with a material such as polyurethane, polyurea, and isocyanate derivatives thereof. The introduced materials are subjected to orientational agitation such that the reinforcing fibers are filamentized in an essentially homogeneous dispersion throughout the solid polymeric material. Once filamentization and dispersion are achieved, the resulting admixture is subjected to knead melting operations for an interval sufficient to achieve melting of the polymeric material introduced into a suitable plasticizing apparatus where the introduced material can be subjected to suitable knead melting operations. The melt kneading operations proceed at a compression ratio between 2.0:1 and 2.9:1. Material so produced is introduced into a suitable closed cavity mold. The resulting molded part has a tensile strength at break at least 20,000 psi and preferably has at least one cantilever. Examples of such parts include cantilevered battery trays. Such trays can have an ABS mounting bracket advantageously associated therewith.